

Lord Edward Smith Stanley, 1775-1851, XIIIth Earl of Derby:
A review of his biological collections and their importance.

The 13th Earl of Derby's bird and mammal collections are well documented by manuscript catalogue, lists, letters, paintings and books held at Merseyside County Museums, City of Liverpool Libraries and Knowsley Hall. Liverpool staff have published few papers on the collections over the past seventy years, R. Wagstaffe's contribution being the major one. (Wagstaffe, 1954a, b, c, 1955a, b, c.). These dealt with letters from donors such as John Latham, John Gould, his collector Gilbert, and J. E. Gray. He has just completed the first bird-type list, 314 specimens of 222 species/subspecies which will be published later this year. Other work, especially on material from the Cook voyage, has already been published (Medway, 1976.) and is in prep, (Medway and Morgan). All of this will serve to reinforce the scientific and historical importance of the collection. To aid in future analysis and to form a firm base an historian, Michael Brennan, has, under the Job Creation Programme, completed a donor/collector, date and specimen index, cross-referenced to the archival material. This preliminary paper is intended to show the scope and wealth of the collection and the role of Lord Derby in the development of natural history during the early and middle nineteenth century. It will also emphasise the point that the scientific bird skin collection is still extant and was not destroyed during the bombing and fire of 1941, (Allan, 1941.), a misapprehension still held by some foreign museums.

The collections were presented to the City of Liverpool by the XIVth Earl of Derby following the late XIIIth Earl's wishes. His other wishes were not followed however, especially that the museum be linked to the Collegiate Institution, (Royal Institution). Although the latter was offered to the city in 1850-52 for £1,000, it was not purchased. This was a great pity as the two combined would have been absolutely invaluable during historical studies at the present time. The Royal Institution collections were sold privately during 1877-1886, (Ormerod, 1953) and only a few hundred specimens reached Liverpool through a circuitous route in 1956. The bird and mammal collections of Lord Derby were known as the Knowsley Museum, and upon transfer to Liverpool formed its first local authority museum, The Free Public Museums, of which the Derby Museum was the base. At the present moment c. 20,000 birds are still extant; the mammals, nearly all mounted, having suffered more heavily in the fire. Much of the important Australian material survived however and is being studied with a view to publication (Harris in prep.).

The following list of donors/collectors and dates has been compiled from the manuscript Catalogue of Birds in the Knowsley Museum, 6 vols. by Louis Fraser prepared during 1848-1850. Although this work was never completed and only covers one quarter of the collection, it does, however, give a good representation of the scope and sources of the collection. For comparison donors/collectors recorded by Sharpe, (Sharpe, 1906), in the History of the Collections of the B.M.(N.H.) have been marked*; donors for which Merseyside has archival material, letters, lists, etc., a, and those associated with type material, T. in the Earl of Derby's collections are also indicated.

The methods of acquisition and size of the collection must also be seen in context. Lord Derby's collection numbered 20,000 - 25,000 in 1851, material having been received from collectors during their lifetimes. In 1872 Bowdler Sharpe estimated only 30,000 - 35,000 birds and eggs in the Brit. Mus. (Nat.Hist.) collections, many of these received after the death of a collector direct or through an intermediary. This had changed dramatically by 1906 when 400,000 birds and 100,000 eggs were present, but in 1851 Lord Derby's must have been one of the largest collections containing a great deal of early material, indeed in historical terms it is still vitally important with regard to type and figured material.

| | | | | | |
|-----------------------------|-----------------------|-----|-----------------------------|-----------------------|-----|
| Abbot | 00.00.1810 | 1 | T a*Cuming H. | 22.06.1833-22.06.1848 | 212 |
| (see Bullock) | | | (B.M.11.06.1841-19.04.1859) | | |
| A Aitken Museum | 24.12.1823-00.08.1839 | 28 | " see Bridges T. | | |
| Alexander.Capt.Sale. | 00.03.1838-08.03.1838 | 39 | | 00.11.1845-00.07.1848 | 4 |
| a Audubon.J.J. | | | " " Gosse P.H. | 10.06.1846 | 1 |
| (see Townsend) | 00.06.1838 | 4 | " " Salle A. | 00.07.1848 | 2 |
| T a*Andersson.C. | 15.01.1832-15.01.1850 | 22 | Cunningham | no date | 2 |
| Baker | 02.10.1848 | 1 | a Curtis | 00.03.1812 | 3 |
| *Banks, Sir.J. | | | Dalrymple | no date | 1 |
| (see Bullock's Sale) | | 1 | Lt.Gen. | " " | 1 |
| Barnett | no date | 1 | Darnley | " " | 1 |
| Barrett | no date | 1 | Countess | | |
| Bartal | | | Davenport D. | | |
| (see Leadbeater) | 00.03.1841 | 1 | (see Latham)" | " | 2 |
| a*Bartlett A.D. | 04.04.1843-08.05.1850 | 25 | a Davies | " " | 9 |
| (B.M.30.12.1843-01.05.1852) | | | T a Davies Gen. T.Sale | | |
| T a Bates.J. | 00.10.1836-00.09.1843 | 51 | | 06.06.1812-08.06.1812 | 18 |
| " see Clee C | 00.09.1843 | 2 | *Day W.S. | 24.08.1843 | 2 |
| " " Kaup Dr. | 00.09.1843 | 3 | T de Lattre A. | 00.06.1813-00.12.1846 | 67 |
| a Bath Sale | 00.04.1810 | 2 | "(see Kaup) | 00.12.1846 | 1 |
| a Beale Rev.H. | 00.00.1820 | 1 | "(" Leadbeater) | 00.12.1836-00.12.1846 | 41 |
| Beechey | no date | 2 | Denison Capt.W.T. | 11.07.1849 | 3 |
| Bentinck Lady W. | 00.00.1833 | 14 | a Dietrichson | 13.02.1831-12.02.1833 | 9 |
| Benzon B. | 18.07.1848 | 1 | Dobie Capt. | 00.12.1830-00.12.1846 | 37 |
| a Bradbury | 00.00.1812 | 15 | a Donovan's Sale | 00.05.1818-09.05.1818 | 8 |
| *Brandt | 00.00.1845(B.M. | | " " see Latham | 00.05.1818 | 2 |
| | 14.03.1842- 7 | | Douglas I. | no date | 1 |
| | 20.11.1853) | | Drummond | 00.02.1835 | 9 |
| Brantingham | 24.05.1844 | 2 | *a Dyson | 00.05.1845-02.06.1849 | 94 |
| T a*Bridges T. | 00.12.1841-00.07.1848 | 286 | Edwards J. | no date | 3 |
| (B.M.21.07.1843-09.09.1846) | | | T a*Eyton T.C. | 18.06.1840-00.00.1846 | 73 |
| " see Cuming H. | 00.11.1845-00.07.1848 | 4 | B.M.31.12.1880-18.02.1881 | | |
| " " Fraser L. | 28.08.1846 or | 1 | Ford | 67.10.1881 | 1 |
| a Brooke's Sale | 23.03.1830-23.03.1833 | 3 | Forster T.B. | 00.08.1840 | 1 |
| Brotherton E.S. | no date | 5 | a*Fortune R. | 00.07.1844-10.10.1845 | 30 |
| Brown & Man,Messrs. | 00.04.1812 | 1 | T a*Fraser L. | 00.03.1847-00.01.1849 | 20 |
| Bruzon | 08.07.1848-18.07.1848 | 9 | B.M.30.10.1846-17.10.1849 | | |
| T a*Bullock's Sales | 00.05.1811-05.04.1821 | 66 | " see Bridges T. | 28.08.1846 | 2 |
| " see Banks Sir J. | no date | 1 | a Freestone W. | 00.05.1828-15.05.1832 | 10 |
| a " " Latham | 00.00.1810-00.05.1820 | 9 | a Fuller | 00.00.1847 | 1 |
| a*Bullock W. | 00.00.1810-26.03.1818 | 23 | a Garnett G.H. | 00.00.1836 | 4 |
| a " see Abbot | 00.00.1810 | 1 | a Giblett J. of London | 27.04.1819 | 1 |
| " see Gould | 00.00.1819 | 3 | Giraud J.P. | 00.07.1842 | 2 |
| a " " Lewin T.W. | 00.09.1810 | 2 | Goodwood | 14.10.0000 | 2 |
| " " Swainson W. | no date | 1 | *Gosse P.H. | 00.05.1845-10.06.1848 | 18 |
| a Burke J. | 00.11.1844-02.08.1847 | 47 | B.M.29.04.1845-11.10.1848 | | |
| " see Hooker Sir W. | 00.11.1845 | 8 | " see Cuming H. | 10.06.1846 | 6 |
| Caley G. | 19.07.1813 | 1 | T a*Gould J. | 00.04.1830-27.02.1852 | 543 |
| a Campbell Lady | 00.06.1841 | 3 | B.M.15.03.1837-14.10.1890 | | |
| Canning G. | 00.07.1847 | 2 | " see Bullock | 00.00.1819 | 3 |
| a Carbery | 00.00.1811 | 3 | " " Kaup | 00.03.1844 | 1 |
| a Cayley G. | 19.07.1813 | 1 | | | |
| Champerys Rev.H.W. | no date | 1 | | | |
| a Chapman | 21.11.1828 | 1 | | | |
| Chitley Capt. | 03.12.1836 | 1 | | | |
| Cland | 24.03.1838 | 20 | | | |
| Clee C. | | | | | |
| see Bates J. | 00.09.1843 | 2 | | | |
| Comrie Dr. | 00.10.1846 | 1 | | | |
| Cooper Mrs. | 00.12.1843-13.12.1843 | 30 | | | |
| a Corbet | 00.11.1818-00.00.1822 | 10 | | | |
| " see Latham | 00.00.1811 | 1 | | | |
| a Cross E. | 00.04.1831-02.04.1831 | 8 | | | |

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|------------------|------------------------|-----------------------|------|
| Gould J. (cont.) | | | |
| " | see Linden | 00.12.1848 | 2 |
| " | " Sturt M | 00.11.1847-00.05.1848 | 8 |
| T a | Gray J.E. | 00.05.1845-00.09.1846 | 10 |
| | Greenfield | no date | 1 |
| | Grosvenor Lord | 24.10.1837 | 1 |
| * | Gunn R. | 00.00.1836 | 17 |
| | B.M. | 15.01.1838 | |
| * | Hardwicke Maj.Gen. | 00.00.1812 | 1 |
| | Harrop | 00.05.1841 | 1 |
| | Harwood Sir B. | 00.00.1794 | 2 |
| | Hesketh Sir T. | no date | 1 |
| | Hodgson Mrs. A. | " " | 12 |
| T * | Hodgson B.H. | 00.00.1845 | 156 |
| | B.M. | 13.01.1843-04.03.1859 | |
| | Holme W. | 00.10.1828 | 9 |
| | Holmes | no date | 2 |
| | Hooker Sir W.J. | 00.02.1843-00.11.1845 | 32 |
| | " see Burke J. | 00.11.1845 | 7 |
| | Hopwood Hon. | no date | 1 |
| a | Hopwood R.G. | " " | 1 |
| a | Horn | 25.06.1819 | 3 |
| a | Hornby Col. | 00.00.1837 | 2 |
| | Hornby E.G. | 00.00.1831 | 1 |
| | Hornby Capt.P.W. | 17.05.1847 | 19 |
| a | Hornby Rev. G. | 06.11.1831 | 3 |
| a | Hunting | 00.06.1832-14.03.1833 | 10 |
| a | Isaacson B. | 06.04.1844-00.08.1847 | 22 |
| T a | Johnson | 00.07.1833-30.03.1850 | 50 |
| T | *Kaup Dr. | | |
| | see Bates J. | 00.09.1843 | 1 |
| | " de Lattre A. | 00.12.1846 | 1 |
| | " Gould J. | 00.03.1844 | 1 |
| | " Leadbetter | 00.09.1844-00.10.1845 | 2 |
| | " Warwick I.E. | 09.01.1849 | 1 |
| | " Williams | 00.06.1847 | 1 |
| a | Keat's Sale | 00.05.1811-08.05.1811 | 8 |
| a | King's Sale | 00.02.1813-01.03.1831 | 17 |
| | " see Latham | 00.04.1816 | 1 |
| T a | *Latham J. | 00.00.1811-00.05.1813 | 23 |
| | " see Bullock's | | |
| | Sale | 00.00.1810-00.05.1820 | 9 |
| | " " Corbet | 00.00.1811 | 1 |
| | " " Donovan's | | |
| | Sale | 00.05.1818 | 2 |
| | " " King's Sale | 00.04.1816 | 1 |
| | " " Leadbeater | 00.00.1815 | 2 |
| T a | *Leadbeater Messrs. | | |
| | | 00.05.1811-00.12.1846 | 1047 |
| | B.M. | 02.08.1839-05.10.1846 | |
| | " see Bartal | 00.03.1841 | 1 |
| | " " de Lattre A. | | |
| | | 00.12.1836-00.12.1846 | 38 |
| | " " Kaup Dr. | 00.09.1844 | 2 |
| | " " Latham J. | 00.00.1815 | 2 |
| | " " Natterer | 00.12.1840 | 110 |
| | " " Swainson W. | no date | 1 |
| | " " Temminck | 00.12.1846 | 8 |
| | Leech I. | 08.10.1853 | 1 |
| T a | *Leverian Museum | no date | 20 |
| Lewin T.W. | | | |
| | see Bullock | 00.09.1810 | 2 |
| | Linden | | |
| | see Gould J. | 00.12.1848 | 2 |
| | Lockett Messrs. | | |
| | | 00.10.1849 | 18 |
| | Lockett W. | 17.11.1849 | 1 |
| a | Lowe Dr. | no date | 27 |
| | Ludwig C.B.S. | " " | 8 |
| | McCleverty | 00.09.1835 | 5 |
| | McCulloch | 03.03.1835 | 6 |
| | McDormell | no date | 1 |
| | McDougall's Sale | | |
| | | 15.07.1814 | 1 |
| a* | Macgillivray J. | 00.11.1845-03.09.1848 | 70 |
| | B.M. | 11.01.1851-14.10.1856 | |
| | McWilliams | 00.06.1847 | 1 |
| | Maddox | 00.06.1838 | 6 |
| | Malcolm Col. | 00.00.1844-00.00.1846 | 21 |
| | Man (See Brown & Man) | | |
| a | Mangles Capt.J. (R.N.) | | |
| | | 00.05.1837-00.05.1839 | 32 |
| | Marrat | 00.04.1831-00.04.1841 | 2 |
| a | Marriot Rev. F.A. | | |
| | | 00.10.1844 | 2 |
| a | Mather | 02.10.1822-00.01.1848 | 45 |
| | Metcalfe W. | no date | 3 |
| | Mills | 00.06.1844 | 1 |
| | Miolon Capt. | 00.11.1837 | 3 |
| a* | Montagu Col. | no date | 1 |
| | B.M. | 00.00.1816 | |
| | Myers J. | 11.11.1837 | 1 |
| | Nash Capt. | 00.09.1837 | 3 |
| | Natterer | 00.12.1840 | 11 |
| | see Leadbeater | | |
| | Nightingale | no date | 6 |
| a | Noel Messrs. | 00.00.1830-28.05.1830 | 24 |
| a | Nuttall | no date | 1 |
| | O'Gambe | " " | 3 |
| | Ogilvy W. | 29.08.1843 | 1 |
| | Parkinson | 00.12.1830 | 18 |
| | *Parry Sir E. | 26.12.1834 | 3 |
| | Patten W. | 00.12.1841-26.12.1843 | 8 |
| | Peter Dr. R. | no date | 3 |
| | Radcliffe | 00.00.1841 | 1 |
| a* | Raffles Sir T.S. | | |
| | | 00.00.1825 | 4 |
| | Ratcliffe | no date | 5 |
| | Reade Sir T. | 00.00.1834 | 4 |
| a | Reddell G.L's Sale | | |
| | | 00.03.1818-02.04.1831 | 11 |
| | Rochatte | 13.02.1843 | 10 |
| a* | Ruppell Dr. E. | no date | 1 |
| | B.M. | 08.04.1842-02.06.1845 | |
| | Sabine J. | 00.06.1830-27.08.1830 | 24 |
| | St. Petersburg Mus. | no date | 4 |
| | Saintsbury | 00.00.1837 | 23 |
| | *Salle A. | 00.06.1848-00.07.1848 | 6 |
| | B.M. | 14.11.1851-28.06.1854 | |
| | " see Cuming | 00.07.1848 | 2 |
| T a | Salt H. | 00.00.1812 | 21 |
| | Sandbach | no date | 3 |

| | | | | | | |
|---|-------------------------|---------------------------|-----|---------------------------|---------------------------|-----|
| | Seaton | no date | 2 | * Whitely H. | 17.12.1846 | 1 |
| | Shuttleworth | 00.09.1823 | 1 | | B.M.30.01.1866-13.10.1880 | |
| | a Smart | 17.09.1811 | 1 | a Whitefield | 00.10.1841-20.11.1848 | 23 |
| T | a*Smith Dr.A.'s Sale | | | * Whitley Capt. | | |
| | | 06.1836-08.06.1848 | 47 | | 04.12.1836 | 2 |
| | a Smith J. | 00.07.1837 | 1 | Whitmore T. | 23.12.1816 | 2 |
| | a Sowerby's Sale | | | Wickstead | no date | 2 |
| | | 00.06.1820-11.06.1828 | 9 | Wiles | 00.00.1834 | 2 |
| | Spencer | 00.11.1840 | 1 | Williams | | |
| | Spiller Capt.G. | | | see Stockall and Williams | | |
| | | 11.03.1835-11.03.1845 | 25 | a Williams R? | 00.04.1845-00.05.1848 | 319 |
| | Stanley Mrs. A | | 1 | " see Kaup | 00.06.1847 | 1 |
| | | 00.06.1847 | 1 | T Williams T.M. | | |
| | Stanley Mrs. G. Rt.Hon. | | 7 | | 00.07.1835-00.03.1845 | 75 |
| | | 00.07.1847 | 1 | a Willis Judge J.W. | | |
| | Stanley Col. | 00.12.1845 | 1 | | 10.09.1834-28.06.1839 | 26 |
| | a Stanley Capt. E. | | 75 | a * Wilson E. | 02.10.1840 | 2 |
| | | 00.00.1823-00.05.1847 | 2 | | B.M.16.07.1846-18.03.1847 | |
| | Stanley Hon. H.E. | | | a Wright | 00.08.1845 | 5 |
| | | 27.07.1850 | 12 | | | |
| | Stanley Rt.Hon.Lord | | 2 | | | |
| | | 21.10.1845-00.08.1846 | 2 | | | |
| | *Stevens S. | 00.10.1849-04.06.1851 | | | | |
| | | B.M.21.11.1848-13.06.1887 | | | | |
| | a Stockall and Williams | | 36 | | | |
| | | 00.11.1840-00.05.1846 | 27 | | | |
| | a*Sturt Capt. C. | 00.00.1832-00.11.1847 | 8 | | | |
| | " see Gould | 00.11.1847-00.05.1848 | 1 | | | |
| | " " Tucker | 15.06.1833 | 2 | | | |
| | a Swainson's Sale | | | | | |
| | | 00.06.1823-00.01.1828 | 1 | | | |
| W | Swainson | | 1 | | | |
| | see Bullock | no date | 1 | | | |
| | " Leadbeater | | 1 | | | |
| | | no date | 2 | | | |
| | Sykes Col. W.H. | | 3 | | | |
| | | 00.11.1837 | 8 | | | |
| | Taylor Sir H. | no date | 1 | | | |
| | Temminck | | 170 | | | |
| | see Leadbeater | | 1 | | | |
| | | no date | 81 | | | |
| T | Thomas | 00.04.1829-23.08.1843 | 4 | | | |
| | Thomas J. | 31.03.1836 | 1 | | | |
| T | a Thompson J. | 00.00.1810-00.09.1842 | 1 | | | |
| | Townley W. | 00.11.1843 | 4 | | | |
| T | Townsend | | 170 | | | |
| | see Audubon | 00.06.1838 | 1 | | | |
| T | a Tucker | 00.06.1825-00.05.1845 | 1 | | | |
| | see Sturt | 15.06.1833 | 81 | | | |
| T | Verreaux | 09.10.1849-06.03.1851 | 4 | | | |
| | | B.M.17.11.1843-18.04.1870 | 1 | | | |
| | Wainwright J. | no date | 1 | | | |
| | Warburton Sir. W. | | 9 | | | |
| | | no date | 1 | | | |
| | Ward E. H. | 14.05.1834-10.05.1836 | 1 | | | |
| | Warner W. | no date | 35 | | | |
| T | a*Warwick I.E. | 11.11.1832-00.03.1845 | 1 | | | |
| | | B.M.18.12.1830-11.01.1858 | 1 | | | |
| | " see Kaup | 09.01.1849 | 1 | | | |
| | Wemyss F. | no date | 1 | | | |

The donor list underrepresents the contributions of probably all collectors, due to the unfortunate termination of Fraser's work, but the importance of certain individuals within this limited context can clearly be seen. Although other names will of necessity be added upon further research, existing names of obvious importance can be projected forwards and their possible importance in terms of the collection as a whole gauged. It is of interest, therefore, to comment briefly upon these individuals, and indicate their importance within the field of natural history as a whole during the time Derby received specimens from them. Much of the following information is taken from Sharpe, 1906; "Dictionary of National Biography"; and the "Biographical Index of Deceased British and Irish Botanists". 1931.

Outstanding among the donors were men such as Gould, Bridges, Leadbeater, Cuming and Hodgson. Leadbeater and Sons (1,047 specimens) were dealers supplying material to Lord Derby. This came from a wide variety of sources, including museums. Leiden Museum, with material from Muller, Temminck etc. sold duplicates, often from type series. The most important aspect of many specimens received is the labels which are in the different collectors' handwriting. These specimens will be studied intensively as amongst them are important specimens (Morgan, 1975) from expeditions and early collectors. Unfortunately, Leadbeater did not always indicate from where he had obtained his specimens when sending them to Lord Derby; tracing them back to source will involve a good deal of research.

Second in importance was John Gould (1804-1881), contributing 543 specimens. Having gained his early knowledge of birds while working as a gardener, becoming a skilled taxidermist, Gould was appointed taxidermist to the Zoological Society's collection in 1827. During the rest of his life he completed 41 folio volumes of natural history material, these being illustrated by 2,999 plates in which he achieved remarkable success in portraying accurately animals and birds in their natural environments.

Thomas Bridges (1807-1865), who collected in Chile, Peru, Bolivia and California between 1827 and 1865, contributed 286 specimens. Bridges made many contributions to the Proceedings of the Zoological Society. His father-in-law, Hugh Cuming (1791-1865) himself donated 212 specimens. In 1826 Cuming gave up his business to devote himself full-time to his enthusiasm for natural history, building himself a yacht and working especially in the Pacific, notably Chile, Malacca and the Philippines. Apart from his own collecting, Cuming also acquired much material collected by other naturalists.

As a final example of such collectors, one may cite Brian H. Hodgson with 156 specimens, a former member of the Indian Civil Service who returned to India after resigning from the Service in 1843. The bulk of his large Indian collection was eventually destined for the British Museum. Our Hodgson specimens carry original labels.

Lesser, but still significant, contributors included William Bullock, traveller, naturalist and antiquarian, whose museum contained valuable ornithological specimens, including material from the Leverian Museum and Sir Joseph Banks, as well as natural curiosities, works of art and armoury, was moved from Liverpool to London in 1809. In March 1819, the British Museum rejected a request that they purchase the museum and it was sold at auction in April, May and June of the same year. Despite the entertainment aspect of his collection, Bullock's significance as a man of science should not be underestimated. He was a member of the Linnaean Society and of other learned societies, conducting his own research into his field of study.

Another sale from which Derby obtained a significant number of birds was that of Dr. Andrew Smith. An early explorer in South Africa, Smith described many species for the first time, his collections being mounted by Jules and Alexis Verreaux. The sale of his collection began in June 1838, after the failure of his exhibition. Rather less material was obtained from the sale of the museum of Sir Ashton Lever in 1806. Like Bullock Lever's museum contained many curiosities, but it also included Cook material amongst its considerable bird collection.

A further source was Thomas Campbell Eyton (1809-1880), a correspondent of such naturalists as Charles Darwin. Prominent among his publications were his Monograph of the Anatidae, "History of the rarer British Birds" and his "Catalogue of British Birds".

Also significant was John Macgillivray, the son of the distinguished natural history academic, William Macgillivray, whose "History of British Birds" had for the first time produced a classification of birds based on their anatomical structure. He pursued a career as Naturalist on the "Fly" (on Derby's initiative), finally, after 1855, spending his life working among the Australasian Islands.

Finally, mention can be made of two men who collected for Lord Derby in the Americas and South Africa. Joseph Burke collected for Derby in South Africa from 1839 to 1842, and in North America between 1844 and 1846. David Dyson was employed during his early life as a weaver and constituted an example of a vanishing phenomenon - the self-educated expert naturalist. Dyson collected in South America between 1823 and 1856, succeeding Louis Fraser at Knowsley before concentrating his interests on conchology.

Thus, even by considering a small number of the donors to the Derby collection the variety of sources used becomes apparent. Lever and Bullock, also interested in museums, are encountered alongside such renowned naturalists as Gould and Cuming, an explorer like Smith, a self-educated naturalist like Dyson and a roving ship's naturalist like Macgillivray. All such strands of the natural history world were drawn together in the person of the XIIIth Earl of Derby, and serve to give some indication and illustration of the 'bridging' role referred to earlier.

The Role of Lord Derby in 19th Century Natural History

An analysis regarding the origin of the specimens forming the collections, and the associated archival material, allows some appraisal to be made of Lord Derby's contacts, and his influence upon them and varied institutions developing at that time. This role of his has been largely ignored, or at least sketchily dealt with, in papers and books published on this period; this is not surprising considering the dearth of published material. Visits to Knowsley or Liverpool would have corrected this, however, and given a more balanced picture.

Lord Derby, born in 1775, was interested in natural history at an early age, as his notebooks when aged 9-11 show us that, like many of his generation, he was undoubtedly influenced by the fervour developing from the Cook and other voyages. He was also in a social position which allowed him to meet and contact people closely connected with these ventures. He began to amass his collection during the first ten years of the 19th century, an important time, with the sale of the Leverian Museum, (1806, 94 specimens purchased) Bullock's sales, (1811-1812, 298 specimens purchased) and General Davies' sale, (1812, 108 specimens purchased). Two exact dates for the latter are recorded in Derby's MSS as June 6th and 8th, 1812, the recent "Natural History Auctions: Register of sales", listing it as early 19th century with no year or date (Chalmers-Hunt, 1976).

Derby's correspondence and lists show him to have been in contact with major ornithologists and naturalists of the day, corresponding with Latham and Montagu in the early days, and others such as Gould and Gray towards the end of his life. He thus spanned, as did Audubon, the early collectors and writers of the late 18th century and early 19th century, forming a bridge between these and the more scientific collectors and writers of the mid 19th century. He was fortunate in living at a time when the development of scientific natural history and institutions was beginning to progress along lines leading to the present day situation. He was not a passive collector and it is obvious that his knowledge and influence reached a large number of people and institutions. His exact role is the subject of an on-going study, but several points illustrate his direct involvement. He was closely linked with the Linnaean Society (President 1832-1834) and was one of the founder members of the Zoological Society of London, being later on the committee,

and President from 1834 until his death in 1851 (Scherren. 1905).

This was in keeping with his major interest, his menagerie and aviary, which was one of the finest in Europe at that time. The sale of his living collections in 1851 gives a clue as to its range and success. 345 mammals of 94 species and 1,272 birds of 318 species were sold, of which no fewer than 207 mammals of 39 species and 549 birds of 45 species had been bred at Knowsley. These included the Hawaiian Goose and 70 Passenger Pigeons. With current practice the fate of that last species may well have been different. To put this into perspective, in 1861, ten years later, the London Zoo had 450 mammals of ? species and 843 birds of ? species.

Lord Derby contributed a number of specimens to the London Zoo and there is no doubt that he brought his knowledge and experience on designs for accommodation, and for successful breeding and rearing of animals, to bear during his time as President. The establishment of a farm for breeding purposes and domestication experiments was an important aspect during the early years of the Zoo. Two other aspects also followed in this close-knit system. Upon dying, animals went into the collections of the Museum, often as types; and the transfer of staff from the Zoological Society to Knowsley was common. His support for other workers bore fruit; Yarrell, Vigors, Fraser, Moore, Gould and Lear all benefiting from his interest and position, in turn making significant contributions to his museum, library and documentation. The artistic documentation of the collections was undertaken by nearly all the major natural history artists of the time, Edwards, Waterhouse-Hawkins, Richter, Wolf, Gould and Lear. Many paintings are still at Knowsley, including Gould's originals for his folios and 400 of Edward Lear's paintings, the majority unpublished and many being traceable to specimens in the museum. Due to the courtesy of the present Earl of Derby, twenty of these formed an exhibition at the Walker Art Gallery, Liverpool, in 1975 (Bailey 1975). The value of these paintings in academic terms is difficult to assess, but the link between Gould and Lear, controversy over the latter's influence etc. can best be judged by looking at these works. A number certainly form the basis of Gould's plates. The patronage of Lord Derby often went beyond a working arrangement, and in Lear's case this was evident; indeed Lear became almost one of the family and his nonsense poems were written for the grandchildren of the XIIIth Earl. Some details of the Menagerie are contained in two finely illustrated works (Gray, J. E. 1846).

Derby also had a botanical interest, corresponding with Hooker at Kew and getting his collectors to obtain specimens for him. In one case, however, that of J. A. Burke in Canada, things did not go well. (Glover 1975)

Lord Derby was not a prolific scientific writer, one of his few works being the descriptions of species obtained during Salt's journey to Abyssinia (Salt. 1814), from which he received many specimens. He did, however, contribute to the Zoological Society's meetings, and produced a number of papers for them as are recorded in the Proceedings. He was a man, primarily however, who employed others to do this for him. He and they kept detailed and meticulous records of the museum, specimens received and comments upon them. It is, though, a great pity that no really good scientific person worked at Knowsley full time. The numbers of pre-type material are difficult to estimate, but they are high. Among the people employed at Knowsley were Dyson, Sherlock, Moore and Fraser. Sherlock produced an inventory of the whole museum in 1822-23. This is now invaluable in tracing back specimens to the Leverian Museum and the Cook Voyages, the contents being numbered case by case and listed and cross-referenced to his own MSS Catalogue. Louis Fraser, first in the early forties and then full-time from 1848-50, prepared the six-volume "Catalogue of the Birds of the Knowsley Museum". The task unfortunately was never finished as Fraser obtained, through the courtesies of Lord Derby the post of Vice Consul in Nigeria, thus illustrating the important reserves of patronage at the disposal of someone in the XIIIth Earl's position.

Thomas Moore, brother of Frederick Moore, Curator of the India Museum, provided the continuity between Knowsley and Liverpool. Employed from the age of eighteen at Knowsley, he superintended the transfer of the collection and remained the curator/director of the Derby Museum until 1892. He kept accurate records of daily work and

the museum was a visiting place throughout his time for eminent ornithologists of the day. Indeed on the public side no fewer than 500,000 people passed through the museum in a year, a figure difficult to better today with the increased population. After Moore's death Henry Ogg Forbes became director and published some catalogues of the collections, including Canon H. B. Tristram's, purchased for £3,150 in 1896. (Brennan in prep.) by Liverpool Museum.

Since that time, much of the value of the Derby collection in scientific and historical terms has been little appreciated. The loss of mammals during the war was a major reason for this. The scientific aspects will start to be uncovered in the first type list (Wagstaffe 1977), and the list of Extinct and Vanishing Species (Fisher and Morgan in prep.). However, the collection and donors offer a valuable insight into Derby's status and influence at a crucial period during the development of scientific natural history, Derby was closely connected not only with individuals but also with the development of the Zoological Society, the British Museum (Nat. Hist.) Zoology section and the London Zoo, as well as with British politics.

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